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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,696	07/31/2003	Yu-Qi Wang		1612

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EXAMINER

SHAPIRO, LEONID

ART UNIT PAPER NUMBER

2629

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/630,696	Applicant(s) WANG, YU-QI	
	Examiner Leonid Shapiro	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Van Brocklin et al. (US 6,552,713 B1).

As to claim 1, Van Brocklin et al. teaches device (See Col. 1, Lines 5-8), comprising a housing (See Fig. 8, items 68, 82, Col. 5, Lines 46-56);

a first convex surface correspondent to claimed first convex lens (See Col. 3, Lines 14-15) located upon the housing such that an object may be placed on the first convex lens (See Fig. 12, item 30, from Col. 6, Line 65 to Col. 7, Line 15);

a light source within the housing arranged to project light on the first convex lens (See Fig. 12, items 26A-26B);

a sensor located within the housing for sensing light reflected from the object when the object is placed on the first convex lens (See Fig. 12, item 22);

a second convex lens located between the first convex lens and the sensor for focusing light reflected from the object onto the sensor (See Fig. 12, item 66);

wherein said first convex lens and said second convex lens are arranged such that when an object contacts the first convex lens, light projected by the light

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source and reflected by the object is clearly focused on and detected by the sensor through the second convex lens (See Fig. 12, item 30, 66, 22, from Col. 6, Line 65 to Col. 7, Line 15);

wherein when the object slides over the first convex lens, the sensor detects a new image position so as to generate a corresponding electronic signal for transmission to a computer system (See Fig. 12, items 16, 30, 22, Col. 1, Lines 5-8 and Col. 7, Lines 8-12).

As to claim 2, Van Brocklin et al. teaches electronic signal is arranged to move a computer cursor (See Col. 1, Lines 5-8).

As to claim 3, Van Brocklin et al. teaches light beam evenly illuminating an entire surface of the first convex lens (See Fig. 12, items 26,30, Col. 7, Lines 3-8).

As to claim 4, Van Brocklin et al. teaches the pointing device is build-in to a housing of a computer (See Fig. 13, item 1302, Col. 5, Lines 3-5).

As to claim 5, Van Brocklin et al. teaches the first convex lens is a biconvex lens (See Fig. 12, items 26,30, Col. 7, Lines 3-8).

As to claim 6-7, Van Brocklin et al. teaches the first convex lens is a single convex lens and located upon the top of the housing (See Fig. 12, item 30, Col. 7, Lines 3-4).

As to claims 8, Van Brocklin et al. teaches the first convex lens is located upon in a front end of the housing (See Fig. 3, item 80, Col. 4, Lines 58-64).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Brocklin et al.

Van Brocklin et al. teaches the first convex lens is located upon in a front end of the housing (See Fig. 3, item 80, Col. 4, Lines 58-64).

Van Brocklin et al. do not disclose the first convex lens is located upon a lateral side of the housing.

It would have been obvious to one of ordinary skill in the art at the time of invention to locate the first convex lens upon a lateral side of the housing since Brocklin et al. teaches that optical pointing device to be removable and incorporated into external device (See Col. 4, Lines 7-10).

Response to Arguments

3. Applicant's arguments filed 07/21/06 have been fully considered but they are not persuasive:

On page 2, 5th paragraph of Remarks, Applicant's stated that element 30 of Van Brocklin is not lens. However, element 30, as shown in Fig. 30, has two curved surfaces, as required by Webster's Dictionary. This element clearly used to bend the

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light (See Fig. 4,12, item 30). Therefore item 30 is completely correspondent to claimed first convex lens.

On the same page, last paragraph of Remarks, Applicant's stated that by using a "convex lens," as claimed," the invention causes a signal to be generated only when the user's finger is properly situated on the lens, so as to avoid unintentionally activating the sensor. However, Van Brocklin teaches the same: " When a user places a finger on curved surface 30, the fingerprint image from the finger on the curved surface 30 is focused by a mounted lens 66 onto the optical sensor" (See Col. 7, Lines 7-9).

On page 3, 2nd paragraph of Remarks, Applicant's stated that the surface may be concave rather than convex, with an additional wide-angle lens being used in that case to capture the image of the finger on the curved surface. However, Applicant's clearly confused embodiment with an additional wide-angle lens (item 46) shown in Fig. 6 which also has a first convex surface (item 30). Notice, that Van Brocklin does not show concave surface, since ray bend will different than shown in Fig. 4,12.

On page 3, 3rd paragraph of Remarks, Applicant's stated that no such ambient light condition detection or drift prevention is necessary in the claimed invention because of the use of two convex lenses as claimed focuses reflected light from the light source on the sensor only when a finger is properly placed, and thus spurious signals caused by ambient light or a passing object will not affect the sensor. However, because element 30 will bend light (See Figs. 4,12), similarly noise immunity to ambient light will improve in Van Brocklin reference.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Telephone Inquire


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 571-272-7683. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LS
10.10.06



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